CLAIMS

1. A process for fabrication a metal-insulator-metal (MIM) device for actively addressing electro-optical effects comprising:

creating one or more surface relief levels in a dielectric layer over a conductive carrier wherein the surface relief levels form trenches;

depositing a first metal in the trenches;

anodizing the first metal to create a non-linear dielectric;

depositing a second metal in the trenches to create an electrical contact with the non-linear dielectric;

forming a contact with the second metal for an electro-optic effect; and

transferring the MIM device to a final substrate by adhesive transfer.

2. The process of claim 1 wherein the creating is formed using an embossing process.

3. The process of claim 1 wherein the trenches are of varying depths.

4. The process of claim 1 wherein depositing the first metal is performed by vacuum deposition.

5. The process of claim 1 wherein the depositing the first metal is performed by electro-deposition.

6. The process of claim 1 wherein the depositing the second metal is performed by electro-deposition.

7. The process of claim 1 wherein the contact is a liquid crystal cell contact.

8. The process of claim 1 wherein a single MIM is fabricated.

9. The process of claim 1 wherein a dual MIM is fabricated.

10. The process of claim 1 further comprising applying a transparent conductor.

11. The process of claim 10 wherein the transparent conductor is PEDOT.

12. The process of claim 1 wherein the first and second metals comprise alloys.

13. An electro-optical display that comprises MIM devices fabricated from the process of claim 1.

14. A non-linear active device used to address an electro-optic effect comprising:

a non-linear capacitive element comprised of an anodized dielectric;

an addressing line formed by a first metal that contacts to the non-linear capacitive component; and

an electro-optic effect contact formed by a second metal that contacts to the non-linear capacitive component.

15. The non-linear active device of claim 14 wherein the electro-optic effect is applied to a liquid crystal cell.

16. The non-linear active device of claim 14 comprises a single metal-insulator-metal (MIM) device.

17. The non-linear active device of claim 14 comprises a dual metal-insulator-metal (MIM) device.

18. The non-linear active device of claim 14 wherein the anodized dielectric is Ta_2O_5.

19. The non-linear active device of claim 14 wherein the first and second metals are tantalum, niobium, titanium, copper, aluminum, or silver.

20. The non-linear active device of claim 14 wherein the first and second metals comprise alloys.

21. A transparent substrate comprising the non-linear active device of claim 13.

22. A liquid crystal display comprising the non-linear active device of claim 1.

23. The liquid crystal display of claim 22 wherein the electro-optic effects are to liquid crystal cells.

24. A process of creating a display device comprising:

fabricating an array of active addressing devices comprised of non-linear capacitive components formed by embossing of a relief surface creating a dielectric over conductive carrier;

depositing metals using the conductive carrier as a conductive terminal;

removing the conductive carrier by transferring the array of active addressing devices onto a substrate; and

forming contacts to electro-optic components from the array of active addressing devices.

25. The process of claim 24 wherein the active addressing components are metal-insulator-metal (MIM) devices.

26. The process of claim 25 wherein the MIM devices are single MIM devices.

27. The process of claim 25 wherein the MIM devices are dual MIM devices.

28. The process of claim 24 wherein the electro-optic components are liquid crystal cells.